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Study Report

**A STUDY OF THE EDUCATIONAL SYSTEM OF JAPAN
WITH SPECIAL REFERENCE TO WORK AND VOCATIONAL EDUCATION**

EMBLEM

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PREFACE

The nation is in the process of formulating its new education policy. The national experiences in the field of education are being analysed and future challenges are being identified. It is important at this stage to review the experiences in other countries to find out how they have approached their problems.

Vocationalization of education is an area which is currently receiving a great deal of attention of planners and policy makers. It is in this background that the Department of Vocationalization of Education, NCERT has conducted "A Study of the Educational System of Japan with Special Reference to Work and Vocational Education." The Study was undertaken on the suggestion of Shri K.C.Pant in his capacity as the Union Minister of Education in the month of August 1985.

I have great pleasure in submitting the study to the Ministry of Human Resources Development with the hope that the salient features of the Japanese educational system with particular reference to work and vocational education will receive due attention in formulating our own national policy on education.

I am grateful to the authors of the Study, Dr(Mrs)S.P.Patel, Professor, Dr.P.Raizada, Reader, Dr.M.Sen Gupta, Reader and Dr.A.K.Dhote, Lecturer for preparing the manuscript in a very short time. I also wish to thank Prof.A.K.Mishra, Head of the Department of Vocationalization of Education for supervising the work of this study and editing the manuscript to bring it in the final form. My thanks are also due to Shri S.Ray, Lecturer for his help in final presentation and processing of the manuscript on the Word Processor. The concerned members of the office staff deserve my thanks for assistance in this work.

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CHAPTER - I

THE EDUCATIONAL SYSTEM IN JAPAN

1. Brief History

Education in the sense of reading and writing presumably began in Japan after the introduction of Chinese writing in ancient times (Sixth century or before). The aristocracy was educated in Confucian thought, Buddhist priests were the teachers and the temples became centres of learning. The first official school for the training of the children of nobility as future government officials was established in 701. Through the growth of popular forms of Buddhism, the peasantry was also exposed increasingly to education. In the Edo period before the Meiji Restoration in 1867, Neo-Confucian thought was adopted as official ideology. While local clans set up schools for educating their own men of talent, there were numerous elementary schools, (50,000 around the middle of the 19th century) mostly private, for children of the general public.

A modern education system was introduced in Japan following the Meiji Restoration with the promulgation of the Education Order in 1872. Under this system, education was organized into three progressive stages: elementary school, middle school and university- and by 1886, three years of elementary education had been made compulsory.

Before the turn of the century, secondary vocational schools, girls high schools, normal schools, higher normal schools and university preparatory schools had been added to the educational system. Then in 1900, the period of compulsory attendance was extended to four years throughout the country and the tuition fee for public elementary schools was abolished. Three years later, professional colleges slightly below the university level were established. In 1908, the elementary school course was extended from four to six years and the six-year course was made compulsory.

With the passing of the Fundamental Law of Education in 1917, nine years of compulsory and free schooling was introduced. The postwar i.e. the present system provides nine years of compulsory schooling, after which upper secondary school education is nearly universal. Some forty percent of Japanese students continue their education in universities. The schools are administered by local and regional autonomous bodies under the broad supervision of the Ministry of Education. Education plays an important role in preparing students for employment while opportunities are determined largely according to school performance.

4. The Government Educational Policy

The fundamental educational policies of post-World War II-Japan were established during the period of "Occupation Reform"

culminating in the EDUCATIONAL REFORMS OF 1947. The reform policies, which stressed liberal and democratic principles, were based on the recommendations of the UNITED STATES EDUCATION MISSIONS TO JAPAN. They were formulated by the Japanese EDUCATIONAL REFORM COUNCIL, passed by the Diet in 1947, and remained the foundation of educational policy in the following decades.

The Fundamental Law of Education (Kyoiku Kihon Ho, 1947) is the basic policy document. The law consists of a preamble and 11 articles. The preamble begins with a commitment "to contribute to the peace of the world and the welfare of the humanity by building a democratic and cultural state" and an acknowledgement that this task depends on education for its realization. The preamble continues by extolling the importance of individual dignity, the raising of people who love truth and peace, and the importance of education in the creation of culture. The first article states the goal of education as "the full development of personality and the rearing of the people, sound in mind and body, who shall love truth and justice, esteem individual value, respect labour and have a deep sense of responsibilities... as builders of a peaceful state and society." The remaining articles in the law establish the policies of EQUAL OPPORTUNITY IN EDUCATION; financial assistance for needy students; nine years of

tree, COMPULSORY EDUCATION; COEDUCATION; the public character of school education; the guarantee of fair treatment of TEACHERS; the promotion of COMMUNITY EDUCATION; the meaning and limits of political education; the separation of religion and education; and the basic commitment to democratic educational administration.

Various laws, such as the SCHOOL EDUCATION LAW OF 1947, were enacted in order to implement the aims of the Fundamental Law. In contrast to pre-war educational policy, which was established by imperial decree, post-war policy was enacted by the Diet according to the democratic principles of constitutionalism. The following basic principles of the post-war educational system were established in this manner:-

1. Equal Opportunity in Education: This is the basic principle in the democratization and modernization of Japanese education. Respect for individuals and for the principle that educational opportunity be distributed according to ability are corollaries of this policy.

ii. A Single - Track School System: This replaced the dual track system of the pre-war period, where an elite track led to higher education and a lower track led to vocational training. The unified system now allows anyone to advance to higher education on the basis of ability.

iii. Decentralization of Educational Administration: Locally

controlled boards of education were created to replace the pre-war system of centralized administration. As for educational subject matter, the Ministry of Education now sets national standards for the SCHOOL CURRICULUM and reviews SCHOOL TEXT BOOKS; Prior to the post-war reforms, the government established curricula and compiled its own text books.

iv. Improvement of the Status, Quality and Remuneration of teachers: Teacher training is conducted at the university level. Because of the special nature of their duties, teachers are given special protection by law. Half of the salaries of the teachers in the compulsory system are borne by the national government.

v. Strengthening of Educational Finance: In order to avoid discrepancies that could occur in the quality of education because of differences in the financial strength of localities, a national subsidy system was established to support educational facilities, buildings and teaching materials in addition to teacher salaries.

vi. The Autonomy and Public Character of Private Schools: The post-war policy is to respect the autonomy and legitimacy of private schools. Legal protection is offered especially for academic freedom in private universities.

As the Japanese economy grew during the 1950s and 1960s, the

demand for education also increased, especially in the areas of Science and Technology. The school system expanded rapidly until the economic slump of the 1970s. With lesser resources available for the expansion of education, attention turned in the late 1970s to improvement of the quality of education. Also there is an emphasis view on increased flexibility in the system so that it would be in a better position to respond to changing circumstances.

3. General Characteristics of the Education System

Modern education in Japan has been characterized by the following general features: (i) an important role played by nationalism in the development of the educational system; (ii) the emergence of educational credentials as the key determinant of employment and social status; (iii) persistently strong foreign influences; and (iv) the continuing existence of contending schools of thought within the educational establishment.

(a) The above features had their genesis in a number of factors and forces, the large seclusion of Japan from foreign powers coupled with dominal divisions within it underlined the need for a strong national consciousness and identity. (b) The great emphasis put on academic background as the key criteria for evaluating an individual had its origin in the elite institutions created by the government, in late 1800s to provide bureaucrats

scientists, technicians, businessmen and managers required for the nation's modernisation effort. This resulted into intense competition in entrance examinations for admission to highest ranking government schools and the spread of a passion for education among the Japanese people, which is in evidence till today. (c) The U.S.A. and Europe constituted models as well as rivals to the Japanese education system as it developed. American utilitarianism and teaching methods, German Science, and the French United School System had a great influence on the developing Japanese system. The most popular slogan given was "Japanese spirit, Western knowledge". Besides, the international movements for democracy elsewhere had a strong influence on Japanese educational thought after World War I. Further, the reform of the entire educational system of Japan after World War II was carried out under American direction with the United States as a model. Lastly, UNESCO and OECD have exercised much influence on Japan in the post-war period. (d) Conflicting schools of thought such as national control versus democracy in education as espoused by Overseas Edal Philosophers and educationalists, government versus private schools, government direction of education versus demand for teacher's freedom are some of the marked contradictions in the system.

4. Present Organisation of the Educational System

The chart on the opposite page shows the present organisation of the national education system in this country. Major characteristics of each type of educational institution noted below:

(1) Compulsory Education:

All children between the ages of 6 and 15 are required to attend the 4-year elementary school and 3-year lower secondary school. Compulsory education is free of charge for all. Children of needy families are provided by the national and local governments with special grants covering expenses for school lunch, school excursion, school supplies, medical care, etc.

A child who has completed the elementary school course is required to go on to a lower secondary school. Local public lower secondary schools must admit any child (except for the seriously handicapped, physically or mentally) who is living within a given attendance area. There is no selection procedure.

However, for parents who wish to send their children to private, fee-charging schools, these are available at all levels from elementary through lower and upper secondary schools and on to college or university. For admission to such schools, there are selection procedures even at elementary and lower secondary levels.

(11) Upper Secondary Education

There are three types of upper secondary schools: full-time, part-time (mainly evening) and correspondence. The full time courses last three years, while both the part-time and correspondence courses are for 4-5 years duration lead to diploma equivalent to that of the full-time course. In May 1981, 94% of all upper secondary school students were enrolled in full-time courses, 3% in part-time courses, and 3% in correspondence courses.

Courses of the Upper Secondary School may be classified into several categories according to the pattern of curriculum: general (academic), technical, commercial, domestic arts, and others. In the 1981-82 school year, 29% of the upper secondary schools offered both general and vocational courses, slightly more than 47% general courses only, and the others vocational courses only. In May 1981 approximately 69.1% of all upper secondary school students were enrolled in general courses.

Admission to the individual schools is usually granted on the bases of credentials from the lower secondary schools and an entrance examination.

(111) Higher Education

There are three types of institutions for higher education:

universities, junior colleges and technical colleges.

Universities offer both undergraduate and post-graduate courses. Undergraduate courses leading to the bachelor's degree last 4 years, except for medical and dental courses which last 6 years. Post graduate courses may be classified into two categories: master's degree course and doctor's degree course. The former lasts for two years beyond the bachelor's degree, and the latter five years. There is also a separate 3-year doctorate course for those who already hold a master's degree. (For medical and dental courses, there is no master's degree course. The duration of the doctor's course in medicine is 4 years beyond the bachelor's degree).

Junior colleges offer two or three year courses to upper secondary school graduates. The credits acquired at junior colleges may be counted as part of the credits leading to the bachelor's degree.

Technical colleges require for admission the completion of the lower secondary course and offer five-year full time courses for the training of technicians. These colleges were inaugurated in 1962.

Universities and junior colleges select their entrants on the basis of an entrance examination and credentials from the upper secondary schools. As for national and local

public universities, the "Joint Achievement Test," a unified examination designed to assess the general and basic upper secondary school attainment of the applicants, was introduced as the first of a two-stage entrance examination system from the 1979 academic year. The second stage is a test given by the individual institutions themselves to determine the final selection of entrants.

(iv) Pre-school Education

Kindergartens admit children aged 3, 4 or 5 and offer them one to three year courses. Three-year olds are admitted to three year courses, four year olds to two year courses and five year olds to one year courses.

(v) Special Training Schools and Miscellaneous Schools

In addition to the above institutions for elementary, secondary and higher education levels, there are a variety of establishments known as "special training schools" and "miscellaneous schools." Most of them are privately operated and provide young people with short term vocational and practical courses in dress making, cooking, book-keeping, typing, design, foreign language, automobile mechanics, electronics, computer programming, etc.

Starting in 1976, miscellaneous schools which fulfil certain standards prescribed by the Ministry of Education have been

reclassified as "senshu-gakko" (special training schools).

(vi) Social Education Facilities

Educational activities for adults and youths are organized both by governmental and non-governmental bodies. Major public facilities for these activities include "Komin-Kan (citizens' public halls)," "youth centres," children's nature centres, museums, libraries, and centres for physical training and recreation. Among the most important are "citizens public halls" set up in most municipalities. They provide a variety of educational activities intended to help improve the intellectual and cultural life of the people living in the community. Their activities include the operation of different kinds of courses, lectures, art exhibitions, film shows and meetings for physical training and recreation.

"Youth centres" are public facilities designed to provide young people with opportunities for residential education and are set up by local education authorities, generally in the country-side.

TABLE .

PROPORTION & CHILDREN ENROLLED IN SCHOOLS

May 1, 1980

School Level	Age-Group	Total	Male	Female
Pre-school	3-5	47.48	42.38	42.64

1	2	3	4	5
Compulsory	6-14	99.98%	99.98%	99.99%
Upper Secondary	15-17	92.9%	91.7%	94.3%
Higher	18-21	33.3%	42.7%	23.6%

5. School Curricula and Textbooks

(1) Elementary and Lower Secondary School Curricula

An ordinance of the Ministry of Education entitled "Enforcement Regulation For The School Education" lays down the names of the subjects to be offered and the standard number of school hours per year for each subject in elementary and lower secondary schools. The basic aim of each subject and the objectives and standard contents of instruction given in each grade for each subject are outlined in the "Course of Study," issued by the Ministry of Education.

Each school organises its own curriculum in accordance with the "Course of Study", mainly giving due consideration to local needs and to the stage of pupils' development and experience. However in recent years, the amount of time available for purely local studies has been increasingly curtailed and these have now virtually disappeared in most cases.

(ii) Upper Secondary School Curricula

The above mentioned Ministry of Education Ordinance specifies the names of the subjects to be offered in upper

secondary schools offering general courses. (Table 4. The objectives and standard contents of each subject, as well as the standard number of "credits" to be acquired are laid down in the "Course of Study for Upper Secondary Schools", issued by the Ministry of Education. This course was revised from 1973 onwards and in its new form applied from 1984. In order to complete any upper secondary school course, the student must acquire 80 or more credits. All students, irrespective of the type of course in which they are enrolled, are required to study the subjects listed in Table 5 and obtain the number of credits indicated. In addition to these required subjects, students may offer a variety of elective subjects including English and other foreign languages and technical and vocational subjects.

TABLE-2

Subject Areas, Subjects and Standard Number of Credits for Upper Secondary Schools

Subject Areas	Subjects	Standard Number of Credits
Japanese Language	Japanese Language I	4
	Japanese Language II	4
	Japanese Expression	2
	Modern Japanese	2
	Classics	2
Social Studies	Modern Society	2
	Japanese History	4
	World History	4
	Geography	4
	Ethics	2
	Political Science & Economics	2
Mathematics	Mathematics I	4
	Mathematics II	3
	Algebra & Geometry	3
	Real Analysis	2
	Differentiation & Integration	3
Science	Science I	2
	Science II	2
	Physics	2
	Chemistry	2
	Biology	2
	Earth Science	2
Health & Physical Education	Physical Education	2
	Health	2
Arts	Music I	2
	Music II	2
	Music III	2
	Fine Arts I	2
	Fine Arts II	2
	Fine Arts III	2

	Handicraft I	2
	Handicraft II	2
	Handicraft III	2
	Calligraphy I	2
	Calligraphy II	2
	Calligraphy III	2
Foreign Language	English I	4
	English II	5
	English II-A	3
	English II-B	3
	English II-C	3
Domestic Arts	General Home-making	4

Notes: (1) Thirty-five units of school hours, each of which represents 50 minutes teaching, yield one credit.

(2) Credit allocation to other subjects is prescribed by each establishing body of relevant upper secondary schools.

TABLE - 3

Compulsory Subjects in Upper Secondary School

Subject area	Subject	No. of credits
(All students)		
Japanese Language	"Japanese Language I"	4
Social Studies	"Modern Society"	4
Mathematics	"Mathematics I"	4
Science	"Science I"	4
Health & Physical Education	"Health"	7-9
	"Physical Education"	2

Arts	One of the following subjects: "Music I", "Fine Arts I", "Handicraft I" or "Calligraphy I"	
Domestic arts (Female only)	"General Home making"	2
Specialised subjects (Students enrolled in vocational courses only)	Not less than 30 credits	4

Aside from the regular courses of study, schools must offer home room activities for not less than one school hour or more per week for all students of all grades. Schools are also required to allocate at least one school hour per week to club activities for all students.

(iii) Textbooks for Use in Schools

Almost all textbooks used in the elementary and secondary schools of Japan are published by the commercial publishers. All of them must be authorized by the Ministry of Education, which also approves the price of each text book. Textbooks are supplied free of charge to all children in elementary and lower secondary schools. Textbooks used in public schools are adapted by local boards of Education every three years.

All pupils in elementary and lower secondary schools, both public and private, are provided with free textbooks by the national government. Upper secondary school students buy their

own textbooks.

6. School Teachers

(1) Training and Certification of Teachers

School teachers are trained at institutions of higher education. Elementary school teachers are trained primarily through 4-year courses but also sometimes through 2-year junior college courses. Secondary school teachers come from different undergraduate and post-graduate courses at public and private universities. Certificates for secondary school teachers are available for any university student who has acquired a minimum number of credits in teaching subjects, professional subjects and general education subjects.

Teacher certificates are granted by Prefectural Boards of Education. They are valid in all prefectures and for life. The certificates are of two classes: the first and the second. The second-class certificate for elementary and lower secondary school teachers may be obtained with two years of study at universities or junior colleges, while the first-class certificates are available for those holding a bachelor's degree.

The second-class certificates for upper secondary school teachers are available for those holding a bachelors' degree, while the first-class certificates are granted to those who have studied for at least one-year in a graduate

school course.

In order to become a school principal, the teacher must hold a first-class certificate.

(ii) Economic Status of Public School Teachers

Salaries of individual teachers serving public schools are determined primarily on the basis of two factors: education and length of service. There are separate salary scales for elementary and lower secondary school teachers and for upper secondary school teachers. Although the amount of the annual or biennial increment and the maximum salaries differ between elementary or lower secondary school teachers and upper secondary school teachers, the starting salaries for beginning teachers with the same level of academic attainment are the same.

In addition to the basic salary, teachers are paid bonus, family allowance and other allowances. Bonus is paid to all teachers three times a year, and amount in total to nearly five times the monthly salary.

Public school teachers are provided with welfare benefits by the Public School Mutual Aid Association in which all public school teachers participate. Benefits given by the Association are of two categories: "short-term benefits" and "long-term benefits".

"Short-term benefits" include medical expenses, child birth expense, disaster allowance, etc. "Long-term benefits" include retirement annuity, disability annuity, survivors' annuity, etc.

7. Educational Administration and Finance

The central educational authority is the Ministry of Education which provides guidance, advice and financial assistance to local educational authorities which are responsible for all levels of education in their own areas.

Boards of education in the 47 prefectures and 3670 municipalities serve as the local education authority. The responsibility for financial support of public education is shared by the national, prefectural and municipal governments. Municipalities are responsible for establishing elementary and middle schools, while prefectures are responsible for high schools and special education schools. The authority to establish high schools is limited to the national and local governments and to organizations that fulfill the requirements of becoming a school corporation. There are more private schools than public schools in Japan especially at the levels of kindergarten and university.

Each level of government provides for its own educational activities with funds derived from its own taxes and income. In addition to general non-specific grants to local authorities, the

national government grants subsidies for education included, and
the amount of the salaries of compulsory school teachers. In

1980-81, the total public expenditure on education was 7.2% of national income. This was made up of 3.2% for higher education, which half was covered by the national government.

CHAPTER-II

WORK AND VOCATIONAL EDUCATION IN GENERAL EDUCATION

1. Significance and place in the general education curriculum:

Under the present education system in Japan, the development of respect for work is an important educational goal. Respect for work is one of the essential components of the type of character that is to be built. In conformity with the above stipulation, the School Education Law in Japan includes provisions for studies concerning work at each level of education.

In elementary school (grades I-VI), the provision is for "the development of basic understanding and skills concerning such everyday needs as clothing, food, housing and industry." In lower secondary schools (grades VII-IX), the provision is for "the development of basic knowledge and skills concerning occupations required by society, an attitude of respect for work, and the ability to choose a future career according to one's individuality."

In upper secondary school (Grades X-XII), the provision is for the furthering of the grade stipulated for the lower secondary school and in addition "the mastery of professional skills, the raising of cultural refinement, and the determination of each student's future career on the basis of his individuality and a conscious awareness of one's social duties".

Education carried out over the whole school stage arrives for the achievement of the above goals. It is directly visible in case of lower secondary schools where Industrial Arts and Home-Making are compulsory subjects. It is also expected of the general upper secondary schools to take provisions for students to take suitable vocational-related subjects. (Table-4)

TABLE-4

Vocational Subjects Recommended to the students in general
schools of upper secondary schools

Subject areas	Subjects
Home Economics	Clothing, Food, Childcare, Home & House Management
Agriculture	Basic Agriculture, Crop, Vegetable, Horticulture, Stock-raising, Floriculture
Industry	Basic Industry, Drawing, Information Technology I
Commerce	Basic Commerce I, Book keeping and Accounting I, Computing Work, Business Planning I, Documentary Work
Fishery	General Fishery, Fishing Vessel Operation

Recently, there has been an increasing emphasis on the necessity of work experience activities because of the following:

- (1) Due to the changes in the social and family living environment, there has been a significant reduction in opportunities for children to participate in such work-related activities as making things, raising animals and

plants, helping with the house work, etc.

(ii) In actual practice, there is a bias towards mere acquisition of knowledge in school education.

(iii) After the compulsory education, almost all children advance to upper secondary schools (94% in 1979), and the number who further advance to universities or other higher education institutions has also increased (38% of all upper secondary school graduates in 1979) so that due to the resultant lengthening of the period of school attendance, children have less opportunity to seriously think about their own future and occupation.

(iv) The curricular bias towards mere acquisition of knowledge at the upper secondary school level, heavy increase in enrolment at this stage and the diversification of student abilities, aptitudes, interests, future courses, etc. has reduced the humanness of educational results leading to a sharp increase in the number of students who have lost interest and confidence in learning.

(v) Even for students who excel in intellectual activities, it has become important to provide them with board experience in work-related activities to stimulate well-balanced, total character development.

(vi) In the general course, which includes almost 70% of upper secondary school students, the fact that there is a strong trend towards education centred on the acquisition of abstract knowledge, and that more than half of all graduates of such upper secondary schools do not obtain any further higher education make the above mentioned necessity even greater. It can be seen in Table 5 that only 9.4% of students in general courses are taking vocational subjects.

TABLE-5

Number of students in general courses who are taking vocational subjects

	Total (A)	Number of students in general courses taking vocational subjects (B)	Ratio $\frac{B}{A} \times 100$
Number of students in general courses	21,36,961	2,01,075	9.4

In Japan, as stated earlier, there is a well-developed on-the-job training system. Life-long employment and age-based wages are the general practice. Young people are hired first and usually fired last. There is no serious unemployment problem in case of young people. Nevertheless, university students in increasing number are purposely delaying graduation. Young people tend to avoid settling down in an occupation after finishing their schooling. Therefore, early vocational development of youth

and to provide them with an experience of pleasure of work and satisfaction derived from completing something, as well as to inculcate correct idea and attitude concerning work and occupation, it has been considered significant to introduce into Japanese elementary, lower secondary and upper secondary (especially general course upper secondary) school work experience activities, e.g., realistic, experimental activities related to production and living designed with educational orientation.

3. Nature of Work Experience Activities in General Education

Based on the recommendations of the Curriculum Council in its report in December, 1976 entitled "On the revision of the Curriculum Standard for Elementary, Lower Secondary and Upper Secondary School Education", the Ministry of Education, Science and Culture revised the courses of study for elementary and lower secondary schools in July 1977 and in August 1978 for upper secondary schools.

In this revision, increased emphasis was placed on experimental learning-related to work. Thus, a new policy of, "Work Experience Activities" has been introduced into school education at all levels. Its significance has been especially stressed at the upper secondary school level. The new course of study was effective from April 1980 for elementary schools, from April 1981 for lower secondary schools and from April, 1982 for

the first grade pupils of upper secondary schools. Work experience activities includes broad range of learning activities such as experiments, practice and actual work in the context of production and everyday life, visits to factories, voluntary service in local society etc. as well as activities emphasising direct experience (including the preparations, making of apparatus, and cleaning up activities for experiments and practice) in subjects and courses in science, social studies, and occupational education.

In the commercial, industrial, agricultural and home economics upper secondary school in Japan, experimental and practical work activities related to chosen vocations are, of course, being carried out. However, as mentioned earlier, in the case of general course upper secondary schools, which account for two thirds of all students at this level, reconsideration is being given to the fact that the curriculum is biased towards intellectual matters, and at the same time there is the unavoidable fact that more than half of general upper secondary school students are not advancing to higher educational institutions immediately after graduation. For such students, work experience activities are a must.

It should also be mentioned here that, at the upper secondary school level in Japan, there are part-time and

correspondence courses besides full-time courses, although the number of students in them is small. In these courses, since the students are gaining through their jobs work experience which is valuable in terms of human development, measures have been taken in the present revision to provide for the granting of upper secondary school credits to these students for their accomplishments at work.

In order to promote work experience activities in upper secondary schools efforts are being made by national and local authorities to stimulate school inventiveness and to provide technical and financial assistance for practical study at specially designated schools.

Aiming at the diffusion of work experience activities, the Ministry of Education, Science and Culture has designated a school (mainly general course upper secondary school) in each prefecture as a pilot school in area of work experience activities.

Types of Work Experience Activities

The types of work experience activities carried out at these upper secondary level pilot schools vary from school to school, reflecting various conditions surrounding each school. However, they can be roughly classified into the following five types in terms of context and method. Many schools are carrying out three or four of these activities (Report of Regional

Planning Panel, APEID, 1982)

(i) Instruction in Vocational Subjects

Here, students in the general course are taught vocational subjects through experiment and practice. For example, during practice in agricultural subjects, students are given experience of the pleasure of work and production by participating in such activities as vegetable raising, rice planting and rice harvesting. These activities are carried out in class units for one or more hours every week in the field or in the school's practice laboratory.

TABLE-6
Number of schools offering vocational subjects to students in general courses, by subject area (1980)

	Agriculture	Industry	Commerce	Fishery	Home eco- nomics	Nursing	Total
Number of schools	62	24	905	4	1219	0	1490

TABLE-7
Number of schools offering vocational subjects to students in general courses

	Total (A)	Number of schools offering vocational subjects to students in general courses (B)	Ratio $\frac{B \times 100}{A}$
Number of schools with General Courses	2,527	1,490	59.0

(ii) Environmental Adjustment and Beautification Activities in and out of school

Here, such activities as cleaning of grounds, tending plants and trees and making and tending flower beds are included in the curriculum, through which the students gain work satisfaction and learn the meaning of public service. These activities are carried out in programmes involving half an hour per day, one or two hours each week, and/or one day on the last day of each month.

(iii) Production Activities

Activities are carried out in rice or vegetable growing, tea picking, apple and orange picking, weed cutting, tree pruning and seedling raising. The methods used depend on the type of production involved, and include time schedules of one hour every week or every other week, as well as several day periods every year.

(iv) Voluntary Service Activities

Here, the following activities are included.

- (a) Visits to welfare homes and caring for elderly people, the physically handicapped people and others requiring special care.
- (b) Cleaning and beautification of public facilities

such as parks, stations assembly halls and tourist areas

(c) Collecting donations for public welfare and other projects.

(v) Experimental Learning Based on Individual Student Interests and Desires

Here, with the aim of expanding the abilities and individuality of each student, students select some production or hobby activity, e.g. typewriting, wood work or sign language and through such activities gain experience of working on their own.

These activities are carried out for approximately one two-hour period each week.

As the next step, consideration is being given to the desirable extension of the teaching of vocational or work-oriented subjects in general courses of all upper secondary schools. The Science Education and Vocational Educational Council, an advisory organ to the Minister of Education, Science and Culture, has been engaged in a feasibility study for such expansion since 1981. In implementing these programmes, the following needs have been identified:

- (a) To make parents and the public understand the importance of work-experience activities;
- (b) To promote enough interest to attract teachers and retain them in the teaching profession;

- (c) To expose the students to the benefits ahead, if they engage themselves in fulfilling these activities;
- (d) To accommodate work experience activities in the curriculum;
- (e) To improve the facilities and equipment for these activities; and
- (f) To increase co-operation with other organs of the community

4. Instructional Materials

The Ministry of Education in Japan has published a guide which explains the aims and contents of the recent curriculum revision, including some explanation of work experience activities and has also published several guides in each field of vocational courses offered in general education. These guides are also useful for the teachers who teach some basic vocational subjects as a part of work experience activities in general courses at upper secondary schools, even though they are primarily designed for vocational course teachers. Some local educational authorities have printed teachers guides for work experience activities in school.

There are no special textbooks for work experience activities introduced in the general schools, but textbooks and other instructional materials prepared for vocational education courses are being offered for use in work-oriented programmes in

these schools.

5. Physical Facilities

The local government authorities and some private organisations which are involved in establishing schools, have the main responsibility for the provision of the necessary facilities and equipment for work experience activities.

The Ministry of Education and Culture usually shares half the cost of all equipment for municipal compulsory schools (at elementary and lower secondary level), which includes the equipment used for work experience activities. At upper secondary school level, the Ministry of Education provides financial assistance in certain cases for vocational subjects which are included in the general education courses under the Vocational Education Promotion Law.

The facilities and equipment for vocational courses are commonly used for general education courses. Some upper secondary schools also provide facilities and equipment for work experience activities by establishing a close cooperation with nearby vocational schools and there are some schools which use privately owned facilities such as private farms on a contract basis, either voluntarily or by paying a fee.

6. Preparation of Teachers

The requirements for obtaining a teacher's certificate in vocational subjects at the lower and upper secondary school levels of general education are the same as those for obtaining a general subject teacher's certificate. These are granted to university graduates (4 year education) who have acquired the prescribed number of credits in specialized subjects as well as in pedagogical subjects. As far as inservice training of teachers is concerned, the prefectural boards of education and prefectural Institutes of Educational Research are providing regular training courses.

Vocational teachers in upper secondary schools are quite distinct from teachers of other subjects, in terms of teaching content and ways of job execution, since they are responsible for practical work and experiments. This results in their having a larger work load both mentally and physically, than other teachers. They also have to undergo inservice education and training in relevant specialized fields because their teaching content is closely connected with fast changing industrial technology. Thus there is a need to update their knowledge and skills, demanded by industrial circles. In this connection teachers undergo frequent inservice training in their relevant specialized fields.

7. Career Guidance and Counselling

In a recent revision of the curriculum standards for lower secondary and upper secondary schools, the importance of career guidance was stressed and resulted in the decision to provide career guidance in a systematic manner, through a whole range of school activities. The classroom or homeroom teachers are expected to play a very important role in this field.

CHAPTER-III

Vocational Education with particular reference to the Upper Secondary Level

1. Underlying Principles

Vocational education in Japan refers to the kind of education undertaken with the aim of having trainees acquire the 'knowledge, skills and posture' required in taking specified types of jobs. It refers in a narrow sense to practical education on the occupation relevant to production, distribution and consumption of commodities, i.e. in agriculture, industry, business, fishery and the like.

All the basic principles underlying educational policy as set out in the Fundamental Law of Education and the School Education Law of 1947 and applicable to education in general are also applicable to vocational education at the upper secondary level. Special mention in this connection may be made of the principles of equal opportunities i.e. education based on ability; a single-track school system allowing anyone to advance to higher education on the basis of ability; strengthening of educational finance for vocational institutions; improvement in the status, quality and remuneration of vocational teachers; and decentralization of vocational education administration.

2. Types of Vocational Education

Vocational education is provided in school, out of school in special training schools/miscellaneous schools and government vocational training centres for the untrained unemployed and in technical colleges or which cut across school and university stages of education. At the school level, it is provided in upper secondary schools offering vocational courses along with general education courses, or vocational courses exclusively. Outside school, it is offered in special training and miscellaneous schools, public vocational training institutions and social correspondence education courses. Besides, some employers have established their own schools for junior high school students whom they intend to hire later. Such company-owned schools, if approved by the local educational authorities and Ministry of Education, can grant diplomas equivalent to those of regular schools. At the higher education stage, vocational education is offered in technical colleges which provide various programmes to train technicians and engineers for Japan's rapidly growing industry. First established in 1962, technical colleges numbered 62 in 1979 and offered specialization in such areas as electrical engineering, architecture and metallurgy.

3. Secondary Vocational Education System

The School Education Law stipulates that the upper secondary school should be aimed at giving the students general education

and specialized education according to their mental and physical growth on the basis of education provided in the lower secondary school. Specialized education is further sub-divided into (i) vocational courses dealing with industry, agriculture, business, fishery, nursing-related courses etc. and (ii) other specialized courses such as music, fine-arts and physical education-related courses. Each specialized course is designed to provide students with effective education by the use of necessary equipment and facilities under the guidance of specialized teachers.

In 1978, there were 8462 upper secondary school courses out of which 4495 were in general education, 564 in agriculture, 876 in industry, 1268 in business, 53 in fishery, 810 in Home economics, 168 in nursing and 228 in music, arts, physical education etc.

Vocational courses are offered either in completely independent schools, or in attached schools. The latter type of school operates either in a separate building located close to an academic upper secondary school or within an academic school but with no sharing of courses or staff. Schools that offer commerce, home economics and nursing courses are more likely to be attached while industrial, technical and fishery courses tend to be conducted in independent schools. During the 1981-82 school year, 29% of the upper secondary schools were offering both general and

vocational courses and 24% offering vocational courses only.

In the same year, the total enrolment in vocational courses was 14,52,608 out of a total enrolment of 44,09,455 which comprised 31.1%. However, the proportion had been higher in earlier years. From 1960-80, the proportion of students in vocational upper secondary schools had dropped by 10.4%, by far the greatest decline occurring from 1970-80, according to unpublished data. This reflects the growing desire of the Japanese youth to enter higher education after the completion of general upper secondary school courses.

In the upper secondary school, the three-year full-time vocational course is the main course. In addition, there are 4-5 year part-time and correspondence courses for working youth. In 1978, the enrolment in part-time courses was 1% of all upper secondary students.

In certain upper secondary schools, advanced courses in areas of special need are offered for the continuing education of school graduates and the length of these courses is more than one year. In 1978, 140 advanced courses were instituted in 100 upper secondary public and private schools for nursing, fishery and agriculture.

For students enrolled in part-time or correspondence upper secondary courses and at the same time undergoing systematic education at certified trade institutions such as miscellaneous

schools or on-the-job training centres in enterprises, there is the system of assessment of their present learning as partial requirement for passing in such courses. They are allowed to earn credits upto half of the vocational subject areas and subjects for study in school. Thus, there is a healthy partnership between trade education institutes and upper secondary schools.

In 1978 vocational students were highly concentrated in business courses (mostly female) and the industrial and technical courses (overwhelmingly male); together these constituted over two-thirds of all vocational students. Compared to the courses in 1960, courses in 1980 showed a decline in Agriculture and Home Economics while enrolments in the industrial-technical courses showed an increase both in the number of vocational students and upper secondary schools.

Regardless of the courses selected by them, all students have to earn a minimum number of credits in required general courses. Vocational subjects are, therefore, studied chiefly towards the end of the upper-secondary course.

4. Special Training School

In addition to regular schools, Japan had miscellaneous schools for 20 years after World War II, which provided education similar to school education. In 1976, however, miscellaneous schools with a specified size and academic standards were

systematic education was given, were newly designated as special training schools if they were having at least 40 students on rolls and were developing student's ability for specific vocations for more than a year at the rate of 800 school hours a year.

Special training schools offer three types of courses (i) upper secondary courses for lower secondary school graduates; (ii) college courses for upper secondary school graduates; and (iii) general courses where no particular school background is required for admission. Special training schools with college courses are called special training colleges.

Home economics-related, medical-related and industry-related courses were the first three courses in popularity in the year 1978. Specific courses in these areas are: dress-making, nursing, dental and medical assistant, civil engineering and construction, information processing, hair-dressing, business-management, culinary arts, etc.

Special training schools with their fast-growing enrolment, now form the third largest group, second only to universities and junior colleges. In 1978, out of a total enrolment of 4,06,613 in special training schools, 3,10,800 was for the college courses, 62,063 for the upper secondary courses and 27,750 for the general courses. With upper secondary education becoming almost universal, the swelling of the number of candidates for college

level courses is obvious.

These rapidly growing schools, chiefly serving graduates of general upper secondary schools and enrolling more females than males constitute an important new vocational alternative to the junior college and the university.

b. Public Vocational Training Institutions

Under the Vocational Training Law, public vocational training in Japan is classified into: (i) basic training for mainly school graduates, (ii) ability development training (for the unemployed shifting to a new job), and (iii) supplementary training (on-the-job training) for technical renewal improvement of skill and (iv) instructor training. These types of training are provided in (a) general vocational training centres for preparing semi-skilled workers in one year courses for lower secondary graduates and 6-month courses for upper secondary graduates; (b) vocational training centres preparing skilled workers in the two year courses for lower secondary graduates and one-year courses for upper secondary graduates; and (c) colleges of vocational training preparing technical workers equipped with high level specialized knowledge in two-year courses for upper secondary school graduates.

In 1978, 2,33,663 trainees were enrolled in government-sponsored vocational training centres which offered short-

duration programmes in such areas as dress-making, automobile maintenance, carpentry, electronics, etc. and were aimed primarily at unskilled young workers and thereby offered them a chance to seek better opportunities in the job market. It may be seen from the above account that the public vocational training institutions correspond in entry qualifications, duration of courses and end-qualifications to the courses located in upper secondary schools and special training schools.

6. Social Correspondence Education

This is not the kind of correspondence education provided in upper secondary schools and universities of Japan. The Ministry of Education certifies the social education courses assessed as worthwhile and provides their organizers with guidance and supervision. These courses are based on diverse learning needs and desires of youth and adults for life-long education. In 1978, 3,83,146 trainees were enrolled in the Ministry of Education certified 170 social correspondence courses which were clerical, industry, living art related and cultural courses like dress-making, house-keeping, cooking, nursing, calligraphy and music.

Vocational training schools are both public and private. Numerous private vocational schools offer courses which are in great demand such as computer programming, communications and fashion designing and are of a short duration of one year or two.

7. On-the-job Training

As part of the distinctive Japanese employment system, many companies offer firm-specific training to upper and lower secondary school graduates. The hiring of inexperienced young workers straight from schools is favoured by most employers because they can choose the best applicants and train them in their own way. The informal training system in large Japanese firms is based on the recruitment of a group of mostly male graduates before the end of the year and the offer of a training programme suited to each level.

Besides developing specific skills and abilities for work in the enterprises, these training programmes also develop workers' identification with the enterprise, based on seniority system, and career-long employment. They are aimed at training the workers in specific production and management techniques of the company, i.e. use of western technology in conjunction with Japanese management methods on the traditional family system.

In fact, vocational training in neither upper secondary schools nor in public training centres has been able to replace specific enterprise training.

8. Curriculum for Secondary Vocational Education

Secondary vocational schools are required to organise a pertinent curriculum in keeping with the regional, local and school conditions, objectives of respective courses and students'

ability, aptitude and future courses of life. Each school is called upon to follow the course of study defined by the National Government and the local standard set by each Prefectural Board of Education with a view to ensuring universality of public education and maintenance and enhancement of the educational standard.

1. Basic Principles Underlying the Curriculum Policy

(a) Scope for each school to maintain its independence and distinctive character- According to this principle only few criteria are laid down by the National Government in the "Course of study" while organization and implementation of the curriculum is left to each school.

(b) Education to be adopted to each student's ability and individuality - According to this principle, compulsory subject areas and subjects in the "Course of Study" have been sharply reduced and the curriculum can be compiled with emphasis on elective subjects to provide diversified education for all.

(c) Students to be able to lead a liberal, flexible and stimulating life - Accordingly, the number of credits required for graduation has been reduced, school hours have been made flexible and the subject areas and subjects have been streamlined.

(ii) Compulsory Subject Areas & Subjects for all Vocational Students

The subject areas and subjects that all students of vocational courses should be made to learn and the standard number of credits thereof are shown in Table 8 given below:

TABLE 8

Subject Areas and Subjects that All Students of Vocational Courses are required to learn

Subject Area	Subject	Standard number of credits	Remarks
National Language	National Language I	4	
Social Studies	Contemporary Society	4	In case special need arises at school, the standard number of credits may be increased or reduced
Mathematics	Mathematics I	4	
Science	Science I	4	
Health & Physical Education	Physical Education	7-9	
	Health	2	
Art	Music I, Fine Art I	1	One out of four subjects should be learnt
	Handicraft I, Calligraphy I	1	
		1	
Home Economics	General Home Economics	4	Compulsory only for female students
Small total for general subject Areas and subjects			
(male) 21 of these should be included in the subject areas and subjects required to be learned before graduation			
(female) 27			

Vocational subject areas and subjects	Over 30	In the business-related courses, the credits for foreign language subjects can be included upto 10 credits
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Small total for home-room and club activities	Over 30	In the business-related courses, the credits for foreign language subjects can be included upto 10 credits
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* One credit is designated as 30 unit-hour lessons in each grade

** One unit-hour is set at 60 minutes as a standard

With the standard weekly school hours in each grade of the upper secondary school set at 30 unit-hours including those for home-room and club activities, the total school hours in each grade usually turns out the school hours equivalent to 96 credits. If the school hours for home-room and club activities are excluded, the total number of credits allotted to the study of subject areas and subjects is reduced to 30. In the vocational courses, the number of credits for the subject areas and subjects that all students are made to learn total 37 (51 for female students), as indicated in the above table and therefore, the remainder 33 credits (28 credits for female students) may be allotted to the study of the subject areas and subjects that the students are allowed to choose in accordance with their needs or the features of each course.

Thus in organising the curriculum for vocational courses, there is flexibility to choose 27 (31 for female students) to 60 credits in general subject areas and subjects and 30-63 credits (59 for female students) in vocational subject areas and subjects. Examples of curriculum for vocational education in the "Outline of Vocational Education in Japan 1983" are shown in the following distribution of credits for general subjects and vocational vocation-related subjects in Table 3 given below.

TABLE 3
Distribution of Credits for General and Vocational
Vocation-Related Subjects

Courses	For Males		For Females	
	General Subjects	Vocation-Related Subjects	General Subjects	Vocation-Related Subjects
1 Industrial Courses	51	41	-	-
2 Agricultural Courses	48	42	42	42
3 Business Courses	42	42	42	42
4 Fishery Courses	41	41	-	-
5 Aquatic Production Processing Courses	54	46	54	46
6 Forestry Course	48	42	-	-

Notes: For female students, four credits in Home Science among general subjects are compulsory.

(iii) Considerations for Curriculum and Instruction in Vocational Courses

- (a) Relevant subject areas and subjects for each vocational course are to be selected on a priority

basis and due attention is to be paid to their mutual relationship. Instead of allotting credits for each of many subjects, ample number of credits should be allotted first to the necessary subjects as a whole. Full consideration should be given in this selection to the mutual relationship between vocational subjects themselves and between vocational and general subjects.

(b) Vocational subjects are to be taught in a practical and empirical manner to individuals or groups. Such methods as lecture, survey, conversation, inspection, field work and practice, project learning, etc. are to be employed. Therefore, enough time for practical work and experiments in vocational subjects should be provided.

Specimen of the Curriculum Structure in Industry-related subjects . Industrial education has been divided into 12 key courses as standard industry-related courses with 64 industry-related subjects grouped under them. The key courses are on machinery, electricity, civil engineering, chemical industry, metal industry, ceramics, textile, interior and design. Fundamentals of industry, Practice Drawing and Industrial mathematics are the most widely used courses in addition to specific courses related to each course. Fundamentals of industry and

industrial mathematics are taught, in the first year of the vocational course as a principle. More than half of total school hours are allotted to experiments and practices. As many credits as possible are allotted to fundamentals of Industry, Practice and Training.

(iv) The Process of Curriculum Development for Vocational Education

As per the Japanese educational thinking, the school curriculum should be altered to deal with social and technological changes and cultural progress and should be different according to the actual conditions of each region, school and students. As, the contents of the curriculum exert an enormous influence on the qualities of the people in the coming generation and even on the future of the nation, each school has to see that national norms with regard to the curriculum are duly adhered to. In Japan, the Minister of Education defines the standards of curriculum which are implemented ultimately by the schools.

The Ministry of Education prepares the Course of Study as a criterion of curriculum and provide the prefectural boards of education with pertinent guidance and advice when necessary.

The Prefectural Board of Education defines the local curriculum standard for schools under its jurisdiction according to the local conditions within the frame work of the relevant

statutory provisions and provides each school with advice.

Each school organises the specific curriculum in compliance with the standards and terms laid down by the Ministry of Education and the Perfectional Board and its environment and the condition of students. The principal and the teachers in a school are finally responsible for the organization of the real curriculum.

9. Administration of Secondary Vocational Education

i. At the National Level

The Ministry of Education is the national government agency in charge of systematic administration of school education, science and culture. Various types of administrative councils such as the Central Council for Education which make recommendations on educational matters are attached to it. Within the Ministry of Education, various internal agencies are set up to share the task of educational administration. For the administration of vocational education, the Vocational Education Division of the Elementary and Secondary Education Bureau is responsible. Following are the tasks to be performed by the Vocational Education Division.

- a) Defining the standards of education in regard to the curriculum, equipment, teachers, etc. and providing guidelines for their implementation.

- b) Preparation and revision of the "Course of Study", textbook and teaching materials such as teachers' guides and manuals.
- c) Organization of training courses and meetings for teachers.
- d) Provision of advice and assistance for the inservice education of vocational teachers.
- e) Selection of schools for the conduct of studies and for the improvement of their efficiency.
- f) Implementation of the Vocational Education Law.
- g) Provision of advice and assistance on vocational guidance for secondary education.

In addition, there are two administrative councils which deal with secondary "Vocational Education".

Science Education and Vocational Education Councils

This is a highly important matter in science and vocational education and present their recommendations to the Ministry of Education.

Curriculum Councils This Council considers the matters on curriculum of elementary schools, lower secondary schools, upper secondary schools and special schools (which include vocational schools) and presents relevant recommendations to the Minister of Education.

(ii) At the Prefectural Level

The Prefectural Governor and the Prefectural Board of Education are incharge of local education administration. The Prefectural Board of Education undertakes all administrative work in education and culture except what relates to universities and private schools which are placed under the charge of the Prefectural Governor. Major administrative jobs handled by the Board are given below:

- a) Establishment, management and abolition of schools
- b) Custody of school assets
- c) Appointment and dismissal of educational and administrative personnel for schools
- d) Matters related to organisation, structure, curriculum, instruction, and vocational guidance in schools
- e) Matters related to textbooks and other materials
- f) Improvement and maintenance of school buildings, teaching aids and other school facilities and equipment.
- g) In-service training of school principals, teachers and other educational staff

The matters related to secondary vocational education are handled by the Upper Secondary School Education Section within the Prefectural Board of Education.

Role of the Ministry of Education vis-a-vis Prefectural Boards of Education

The major function of the Ministry of Education is to provide the Prefectural Boards of Education and Governors with pertinent guidance and advice for the proper execution of their duties and functions. The Ministry does not direct or order them over it, nor does it intervene directly or specifically in the management of public and private upper secondary schools, except for the Ministry established national schools.

19. Financing of Secondary Vocational Education

The National Government, the Prefectural Governments and Educational Foundations meet the expenses of the schools established by them, as per the School Education Law. The National Government subsidy for Vocational Education is determined by the Vocational Education Promotion Law which was enacted in 1951 because of the singular importance of vocational education for industrial and economic advancement of the country and improvement of life of the people. This law aims at having the people cultivate and develop proper belief in their own labour, master industrial technology and foster creative ability through vocational education, thereby contributing to the nation's economic independence.

The national government is obligated by this law and other relevant statutes to strive for the promotion of vocational

education through the following tasks:

- To prepare a comprehensive programme for the promotion of vocational education
- To improve the contents and methods of vocational education
- To improve the facilities and equipment for vocational education
- To develop and implement the programmes for the inservice education of teachers
- To promote cooperation with industrial circles carrying out vocational education

In case the equipment and facilities for practical work in vocational education in public and private upper secondary schools fall short of the national norms, the national government is duty-bound to subsidize all or a part of the expenses needed for the improvement of facilities.

In terms of Vocational Education Law, the National Government is obligated to extend subsidies to the tune of one-third of the expenses on vocational education, besides, giving other subsidies of a general nature. One-third of the expenses incurred on general equipment, general facilities, special equipment, equipment renewal, information processing and construction for practising vessels used in fishery education are

to be provided by the National Government.

11. Textbooks for Secondary Vocational Education

Textbooks provide the principal teaching materials in Japan. Each school is required to use the textbooks approved by the Minister of Education (authorised textbooks) or the ones published in the name of the Minister of Education. For special areas, in which no textbook is authorised, school principals are allowed to choose books after getting prior approval of the competent Board of Education. In case of national and private schools, authority to choose books resides in respective school principals. The prices of textbooks are also fixed with the approval of the Ministry of Education. The Ministry of Education textbooks are limited and only such textbooks for vocational subjects or special schools are produced by it for which the demand is so short that private authors will not publish them. The Ministry of Education has been systematically compiling textbooks for vocational subjects dealing with agriculture and fisheries, etc. because of these reasons.

12. Teachers for Secondary Vocational Education

1) The system of Vocational Teacher Training

Under the teacher training system of Japan, anyone who has earned for graduation the credits specified by the Educational Personnel Certification Law is awarded a teachers' certificate at any of the national public and

private universities authorised to do so. The National teacher training universities and university faculties train teachers for compulsory and special education whereas general universities train upper secondary school teachers.

The teacher certificate is of two types: regular and emergency. The regular certificate is classified into the first class certificate and second class certificate. The first class certificates are available for those who have studied for at least one year in a graduate school course while the second class certificates are available for those holding a bachelor's degree only. The emergency certificate is issued when teachers in a new area are not available. The certificate is effective for three years.

In 1979, 192 certified vocational teachers training courses were being run in graduates schools and advanced courses of national public and private universities in which first class certificates were being issued. In the same year, 347 certified vocational teacher training courses were being run by the national, public and private universities in which second class certificate were being issued. The vocational subjects covered in both first class and second class courses were agriculture, industry, business and fishery.

ii) Qualifying Examination for Vocational Teachers

The secondary vocational education is so widespread in scope that it is difficult to secure an adequate number of teachers in certain fields only through teacher training in specified universities. Since it is essential that vocational education should keep pace with the progress of industrial circles, it is necessary to induct competent persons familiar with vocational technology and educational methods from specified fields into vocational schools. The system of Teachers' Qualifying Examination has been established for this purpose only. Under this system teaching certificates are granted to those who pass in the qualifying tests administered by the Ministry of Education or Education-commissioned Universities. Since 1973, this type of examination has been administered in such vocational subjects as architecture, interior, design and computation.

iii) Preferential Measures for Vocational Teachers

Vocational teachers are quite different from general teachers in several ways. So far as their roles and responsibilities are concerned, (a) they have to organize and supervise practical work for the students which requires great mental and physical exertion, (b) they have to undergo in-service education in specialized fields to keep up their

knowledge of industrial technology up-to-date and (c) they have to keep in view personnel requirements as demanded from industrial circles. It is because of these reasons that the Vocational Education Promotion Law provides special provisions in view of the peculiar nature of vocational education, regarding the qualifications, quota and pay of the teachers incharge of vocational education. Under the Law concerning Payment of Vocational Education enacted in 1937, the national and public school teachers and technical assistants incharge of specialized subjects in industry, agriculture and fishery courses are currently provided with special allowances equivalent to 10% of their monthly pay. Alongwith general education teachers, they are paid bonus which is five times their salaries. They are also provided other benefits/allowances along with general teachers.

CHAPTER IV

SUMMARY

General Education

- i) Japanese education from the very early years of its modernisation effort was impregnated with the principles of nationalistic thinking. Besides spreading enlightenment, it was aimed at enriching and strengthening the State and instilling loyalty and allegiance to it.
- ii) The existing Japanese system of education is based on the ideals of democracy, individualism, freedom, diversification, decentralization and internationalism. In order to achieve these lofty ideals, Japan follows the principles of equality of educational opportunity based on ability, decentralization of educational administration, improvement in the status and quality of teachers, a national subsidy system for localities with scanty resources, the autonomy and public character of private schools and universities and improvement in the efficiency of education at all levels.
- iii) The Fundamental Law of Education (1947) which is the basic policy document on education incorporates "respect for labour and a deep sense of responsibility among students as builders of a peaceful state and society" as a principal goal of education in its very first article.
- iv) Japan

has a democratic single-track 6+3+3 school system which has replaced the earlier dual track system where an elite track led to higher education and a lower track led to vocational training. The unified comprehensive, co-educational system allows anyone to advance to higher education on the basis of ability.

6) Admission to upper secondary schools is on the basis of credentials from the lower secondary schools and an entrance test. Universities and colleges admit students on the basis of an entrance test and credentials from the upper secondary schools. For a number of local public universities, a university entrance examination was introduced in 1972 with limited participation. The national government entrance examination for the university entrance examination was introduced in Japan in 1947 and in 1949. In 1949, compulsory elementary education was extended to six years. In 1947, nine years of compulsory education consisting of six years of elementary and three years of lower secondary education was made compulsory. In 1970, 97% of all graduates of lower secondary schools were enrolled in higher secondary schools. Upper secondary schools have now almost become universal and over 90% of those passing out of school go in for university education.

(1) Decentralization of educational administration is an important feature of the Japanese system. Prefectural boards of education and municipalities play an important part in the organization and administration of education. The Ministry of Education (National Government) sets the standards for the schools, curricula and textbooks and authorizes school textbooks besides providing the necessary finance for education. One-half of teachers' salaries for compulsory education and one-third of the capital and equipment and facilities for upper secondary schools are provided by the national government. The role of the Ministry of Education Ministry has changed drastically from a central supervision and inspection to a service to local educational authorities.

(2) The "Curriculum of Study" which is the core of the compulsory education is regulated by the Ministry of Education in Japan in accordance with the ordinance entitled "Enforcement Regulation for School Education". It lays down the subjects to be offered by students, the objectives and contents of subjects and the standard number of hours per subject in elementary, lower secondary and higher secondary schools.

(3) For the completion of the upper secondary course, the

IV:4

Students must acquire 30 or more credits. The compulsory subjects of study for all students (including vocational specialized courses) are Japanese Language, Modern Japanese History (Social Studies), Mathematics, Science, Health and Physical Education, Arts (The Art of Shaping, Crafts, Handicrafts, Calligraphy, etc.) and Home Room (for female students only). In addition, they should take up elective subjects including technical/vocational subjects and English and foreign languages.

ix) Regardless of the courses selected, all students have to earn a minimum number of credits in required general courses, vocational subjects are therefore, studied mainly towards the end of the upper secondary course.

x) Besides regular subjects, schools must allocate at least one school hour per week to 'Home Room' activities and one school hour to ' hobby' activities for all students.

xi) Almost all textbooks used in the Japanese elementary and lower secondary schools are published by commercial publishers but authorized by the Ministry of Education which also approves their prices. At the upper secondary stage, the Ministry of Education publishes only those books for specialized education (which include vocational education) for which there is so little demand that no private publisher will take up their publication. The prices of all

textbooks are to be approved by the Ministry.

iii) Realizing the importance of extended science and technical education, the Japanese government established various science bureaus and set about increasing the expanding schools and colleges and improvement of science education. During the 11 years from 1911 to 1922, 140,000 university graduates were produced and science and technical education which had been given much less attention during the Meiji period began to play an important role in the development of modern Japan. The government played a central role in the development of science and technology and extended the government's role in the development of science and technology. The government played a central role in the development of science and technology and extended the government's role in the development of science and technology.

iv) One of the major goals of the Japanese government was to develop an efficient educational system. The government established various educational institutions and extended the government's role in the development of science and technology. The government played a central role in the development of science and technology and extended the government's role in the development of science and technology. The government played a central role in the development of science and technology and extended the government's role in the development of science and technology. The government played a central role in the development of science and technology and extended the government's role in the development of science and technology.

reservoir of human capital built through such massive investments in education over time has enabled Japan to stage such a fast economic comeback after war.

xiv) School teachers are trained at institutions of higher education. Elementary school teachers are trained primarily at four-year integrated university courses, but also sometimes at 2-year junior colleges. Secondary school teachers come from different undergraduate and post-graduate courses at public and private universities. Certificates for secondary school teachers are available for university students who have acquired a minimum no. of credits in teaching subjects, professional subjects and general education. Depending upon the level of teachers' qualifications, the teachers' certificates are of two classes - 1 class and 11 class. In order to become a principal, the teacher must hold a first class certificate.

xv)(a) Salaries of individual teachers are determined primarily on the basis of their education and length of service. There are separate salary scales for elementary, lower secondary and upper secondary school teachers and the rate of their increment is also different. However, the starting salaries of beginning teachers with the same level of academic qualifications are the same.

(b) In addition to basic salary, teachers are paid bonus,

family and other allowances besides a number of welfare benefits. Bonus is paid to all teachers three times a year and amount in total to nearly five times the monthly salary. xvi) In addition to general non-specific grants to local authorities, the national government gives subsidies to education including half the amount of salaries of compulsory school teachers. In 1980-81, the total public expenditure for education amounted to 7.2% of national income and 12.7% of the total public expenditure.

2. Work and Vocational Education

1) 'Respect for work' is one of the essential components of the type of character that is to be built through education as per the Fundamental Law of Education (1947). Accordingly, the School Education Law includes provisions for education concerning work at each level of general education.

i) In elementary school, the provision is for developing basic skills for self-reliance in meeting day-to-day needs. In upper secondary schools, the provision is aimed at developing basic knowledge concerning occupations and the ability to choose a future career, while at the upper secondary stage, the provision is for acquiring vocational skills, determining future career and developing a sense of one's social duties.

iii) To inculcate correct ideas and attitudes towards work and occupations, to correct the over emphasis on abstract learning and thereby restore interest and confidence in school, and to foster early vocational development, vocational subjects in general education at the upper secondary stage have been introduced as part of an overall programme of work education which includes environmental improvement and beautification activities, production activities, voluntary service activities and activities based on individual students' hobbies and interests. In 1978, 9.4% students in general education courses had taken up vocational subjects in agriculture, home science, industry, commerce and fishery

iv) Even before the beginning of the 20th century, an important aim of education in Japan was to make the people 'diligent' besides 'enlightened and loyal.' It was believed that "people's vocational knowledge and skill constitute intangible capital for enriching and strengthening the nation and together with the drilling of army and navy, are essential for maintaining national independence". This conviction was given a legal shape with the passing of the Vocational School Ordinance.

v) Vocational education as an important part of education has been co-existent with general education in Japan right

from the beginning of the modernisation effort in education. By now, its evolution spans about a century.

vi) In 1960, 41.4% of the enrolment in upper secondary schools was for vocational education. In 1980, the percentage came down to 31.1% with the largest decline occurring between 1970-80. The decline was due to the near universalisation of upper secondary education and the growing desire of the Japanese youth for university education. Besides, the large corporations prefer to have their pick of the best graduates passing out of upper secondary schools to whom they provide their own industry-specific training. Employment of the upper secondary school graduates poses no problems.

vii) The full-time 3-year vocational course is the principal course in upper secondary schools offering vocational courses. Besides this, there are part-time and correspondence courses of 4 to 5 years duration for working youth. While the percentage of students in part-time courses is coming down, that of correspondence courses is steadily going up.

viii) Advanced courses of one or more years' duration in areas of special need are also available in some upper secondary schools besides the three-year vocational

education courses.

ix) Students of part-time correspondence courses in vocational education who are at the same time undergoing systematic training in enterprises are allowed to earn credits on account of this training (part-time students for vocational subjects prescribed).

x) The school curriculum in Japan does not lack universality of content as well as diversity in keeping with regional and local school conditions and the needs and abilities of students. Each school is called upon to organise a pertinent curriculum by following the course of study defined by the national government and the local standard set by each prefectural board of education in the light of its own conditions, student ability, aptitude and future course of life.

xi) Regardless of the type of courses-general or vocational-selected by them, all students are required to learn a number of general subjects, viz., National Language I, Contemporary Society (Social Studies), Mathematics-I, Science I, Physical Education and Health, and art subject out of four prescribed and home economics (for girl students only) besides optional vocal and art subjects. They have to earn a minimum number of credits in these compulsory courses. Vocational subjects are, however, studied usually

towards the end of the upper secondary course.

xii) In vocational courses, the number of credits for the general and vocational subjects that all students are made to learn come to 57 (27+30) for male students and 61 (31 including 4 for Home Science + 30) for female students. The remainder 33 credits* (29 for females students) are to be allotted to the study of subject areas and subjects that students can choose in accordance with their individual needs and specific features of each course. In business related courses, credits for foreign language subjects can be included upto 10.

xiii) Thus in organizing the curriculum for vocational courses, there is flexibility to choose 27 (31 for female students) to 60 credits in general subject areas/subjects and 30-63 (59 for females) in vocational subject areas and subjects. This flexibility is in keeping with the distinctive features of curriculum viz., ensuring the preservation and distinctive character of each school adapting according to each student's level of ability and individuality and enabling students to learn a flexible and evolving one.

* In all, there are 100 credits for the upper secondary level besides Home-Room & Hobby Activities

xiv) The Vocational Education Division in the Elementary and Secondary Education Division of the Ministry of Education establishes curriculum standards for vocational education, norms for equipment and teachers, etc. and provides guidelines and part of the finances for vocational education. The actual organisation and administration of vocational education is left to the prefectural boards of education. The major function of the Ministry of Education is to provide guidance and advice to the prefectural boards of education for the proper execution of their assigned functions.

xv) Because of the singular importance of vocational education for the industrial and economic advancement of the country, a Vocational Education Promotion Law was enacted in 1951. The national government is obligated by this law and other relevant statutes to strive for the promotion of vocational education through important measures. If the equipment or facilities for practical work in vocational subjects fall short of the national norms, the national government is duty-bound to subsidize all or a part of the expenses needed for their improvement. The National Government is also under obligation to extend subsidies to the tune of one-third of the expenses incurred on general and special equipment and facilities for vocational education

in the upper secondary schools.

xvi) Vocational Education in Japan is provided in school, out of school, in public vocational training centres to the untrained unemployed, and in technical colleges which cater to the needs of different levels and sections of population. At the school level, it is provided in upper secondary schools. Outside school, it is offered in special training and miscellaneous schools, public vocational training centres & social correspondence education courses. Vocational education is also provided in some industry-owned schools which are approved by the Government to issue their own diplomas. A unique feature of the Japanese Vocational Education System is the five-year integrated course in technical colleges which train engineers and expert technicians for Japan's rapidly growing industry and employ graduates of the lower secondary schools at the age of 15.

xvii) Special training (vocational) schools with their fast-growing enrolment, now form the third largest group second only to universities and junior colleges in Japan. A major portion of the enrolment in these training schools is for college courses. With upper secondary education becoming almost universal, the swelling of the number of candidates for college level courses is obvious. These rapidly growing

school form an important new vocational alternative to the junior college and university.

xviii) As part of the distinctive Japanese employment system, many companies offer firm specific training to upper and lower secondary school graduates. The majority of inexperienced young workers brought from school are favoured by most employers because they can mould the new applicants and train them in their own way. In large Japanese firms, school graduates are recruited near the end of the year and offered a training programme suited to their level.

xix) (a) There is a regular system of vocational teacher training in Japan whereby teachers are trained for (1) first class certificates in graduate schools and advanced courses of national public and private universities after finishing the four year university course, and for (2) second class certificates in undergraduate courses at the national, public and private universities. The four-year university courses for second class certificates are integrated courses of general, professional and vocational education.

(b) Besides regular certification, emergency certification are also issued when teachers in a new vocational area are not available. In order to overcome the shortage of qualified teachers in certain areas by recruiting people

with excellent vocational technology and teaching competence, a qualifying examination for vocational teachers has been instituted since 1973 by the Ministry of Education in such areas as architecture, design and computation. This examination is of much help in recruiting expert teachers for upcoming occupational areas.

xx) In view of the more complex, strenuous, and exacting nature of the vocational teacher's work, the vocational teachers and technical assistants in charge of specialized subjects in industry, agriculture and fishery courses are provided with special allowances equivalent to 10% of their monthly pay.

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